

MASTER HEALTHY EATING HABITS

**CONTROL
APPETITE**

**IMPROVE
HEALTH**

**LOSE BELLY
FAT**

R. HUTCHINS

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Introduction

Life is a lottery. If people keep themselves slim and active, there is no guarantee they will live a long life free from health problems. **However**, it's widely accepted that choosing to eat healthily and holding a healthy weight puts **the odds in your favour**.



Nowadays, we have unlimited access to online and written advice on how to be healthy and lose weight. Why then, is it difficult to change the way we eat and get fit?

This book is a journey in understanding the **'true picture'** of...

- **HOW** to change eating habits to lose fat and keep it off
- **WHEN** to eat to be in control of your appetite
- **WHAT** to eat to feel more energetic and capable of doing what you want

People can choose from numerous books and online films offering healthy living and exercise advice. There are some inspiring people. Many are popular with millions of views or thousands of books sold. Typically, lifestyle influencers give information on diet, provide recipes and teach people how to exercise. Although each lifestyle or fitness influencer has a different approach, the advice centres on the same basic principles; eat less calories to lose weight, be more active to lose body fat and build muscle. Most of these influencers present themselves as fine examples of health, good looking, well-groomed, athletic body shapes.

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The human brain seeks to minimise effort so behaviours that you repeat everyday become automatic. If you do something without much thought, it is a lot easier for the brain and body to cope because it involves less effort.

To be able to change unhealthy habits it helps if you understand how habits form (8, 9).

Eating habits happen like this

1. **Trigger** – a signal that prompts you to an action such as eating or drinking.

Feeling thirsty or tired or hungry or in a low mood are all triggers. Just the sight of food or drinks can be enough to make people want to eat.

Another trigger would be someone offering to share food which is accepted even if a person does not feel hungry.

Triggers that happens outside of your body (external)

- Sight or smell of food
- Watching others eat
- Advertisements or watching cooking programmes
- Planned or unplanned demands from our work or private life which make us feel stressed

External triggers are more likely to make us eat when we have no physical triggers (internal) that remind us to eat.

Physical sensations from within the human body that signal we are hungry (internal triggers)

- Empty stomach that growls and gurgles
- Headache
- Lightheaded feeling
- Grumpy and less tolerant

- Lack of energy
 - Shakiness and general feeling of weakness
2. **Routine** – a habit that doesn't vary. Happens every day. It may be that work, or home environments have food and drinks nearby. People see food and eat it or want to eat the same as others to 'fit in'. Eating whatever food is available or meal served, especially if they were not involved in planning or preparation.
 3. **Reward** – Eating food or drinking alcohol gives people something, makes us feel 'good' or relaxed or relieved. Helps deal with 'feeling' bad, sad, unhappy or tired.
 4. *Whenever there is a trigger and the urge to get the reward, we will repeat the same habit.*

Examples



On the way home from work, a person starts thinking about drinking a glass of wine or having a beer when they get home. This is using alcohol to 'unwind' in the evening.



If a person has been busy all day and not had time to eat much food, they will eat an evening meal, then keep snacking, because they are hungry, tired and have not eaten enough earlier in the day.



5 Healthy habits recommended by the UK NHS 2018 (2)

1. Not smoking
2. Eat a healthy diet
3. Regular exercise – 30 to 60 minutes a day of moderate to vigorous activity (makes you feel hot, sweat, increases heart rate).

4. Keeping a healthy body weight (BMI 18.5–24.9)
5. Moderate alcohol consumption

Recommended no more than 14 units in a week or 2 units every day.

1 unit = ½ pint beer/lager/bitter (around 4% ABV) OR 175ml wine or single shot spirits 25ml.



How do I change?

Think about...

What are my triggers?

Tick the box that is the nearest reflection of your current lifestyle

When do you eat?

Meals and snacks		Tick box
I eat breakfast*	Most days	
	Sometimes	
	Never	
I eat a 'lighter' or 'snack' meal* (lunch or midday meal) (small cooked meal or sandwich)	Every day	
	Sometimes	
	Never	
I snack between my meals*	In the morning	
	In the afternoon	
	I snack in the evening	
I eat an evening meal* (dinner or supper) (main cooked meal of the day)	Every day	
	Sometimes	
	Never	

**A meal is an occasion when people sit down and eat, usually at a regular time.*

How much do you eat?

Snacks		Tick box
If I want to snack, I would choose to eat one food snack or have a drink that contains calories (fruit juice, smoothie or latte or hot chocolate or sugary fizzy drink, cappuccino)	Most days	
	Sometimes	
	Never	
If I eat one snack, I would end up eating several	Most days	
	Sometimes	
	Never	

Meals		Tick box
I do not prepare meals*; I eat what I am served	Most days	
	Sometimes	
	Never	
Majority of the meals* I eat are readymade or takeaways	Most days	
	Sometimes	
	Never	
My main meal *of the day fills a meal plate	Most days	
	Sometimes	
	Never	
My main meal *of the day fills a meal plate and I have a second helping	Most days	
	Sometimes	
My main meal* of the day fills a meal plate and I eat a dessert or snack after the meal	Most days	
	Sometimes	
	Never	

**A main meal usually takes more time to prepare and involves combining different foods that are cooked, mixed or served together; one to three courses. A 'light' or snack meal is smaller, readymade or quick to prepare. Some people*

serve the main meal at midday, with supper as the late afternoon/early evening meal, while others may call their midday meal lunch and their early evening meal supper or dinner.

When do you drink alcohol?

Alcohol		Tick box
When do you drink alcohol	Every day	
	Most evenings	
	Once or twice a week	
	Never	

When are you active?

		Tick box
I will spend at least one-hour walking	Every day	
	Most days	
	Once or twice a week	
	Rarely	
I exercise or play a sport	Every day	
	Most days	
	Once or twice a week	
	Rarely	

These questions help show the reality of your current eating and activity habits.

As you continue reading this book your answers to these questions will be useful in planning what you want to change.

**The brain is ‘programmed’ by human history
to do whatever it takes to survive**

Humans have survived over thousands of years because people
‘see food, eat food’

Food makes us feel good and gives us energy to think clearly and move around.

This is...

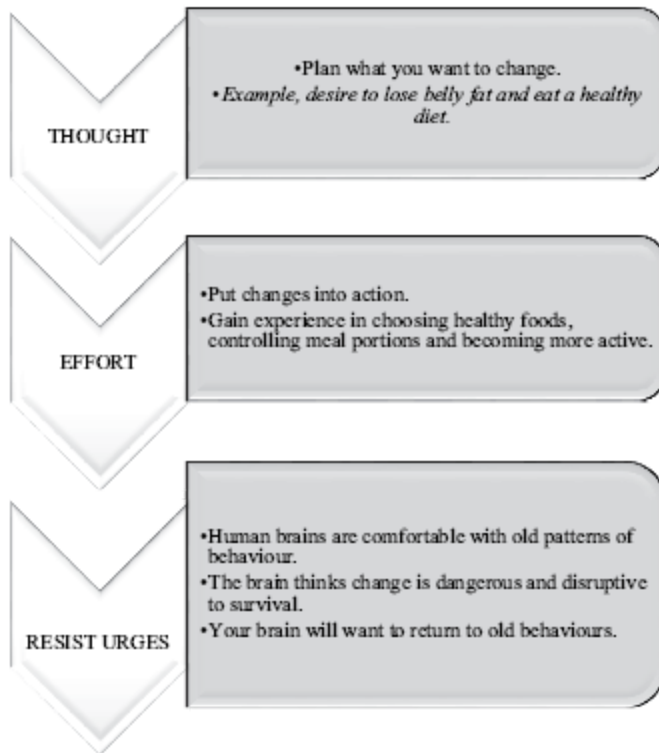


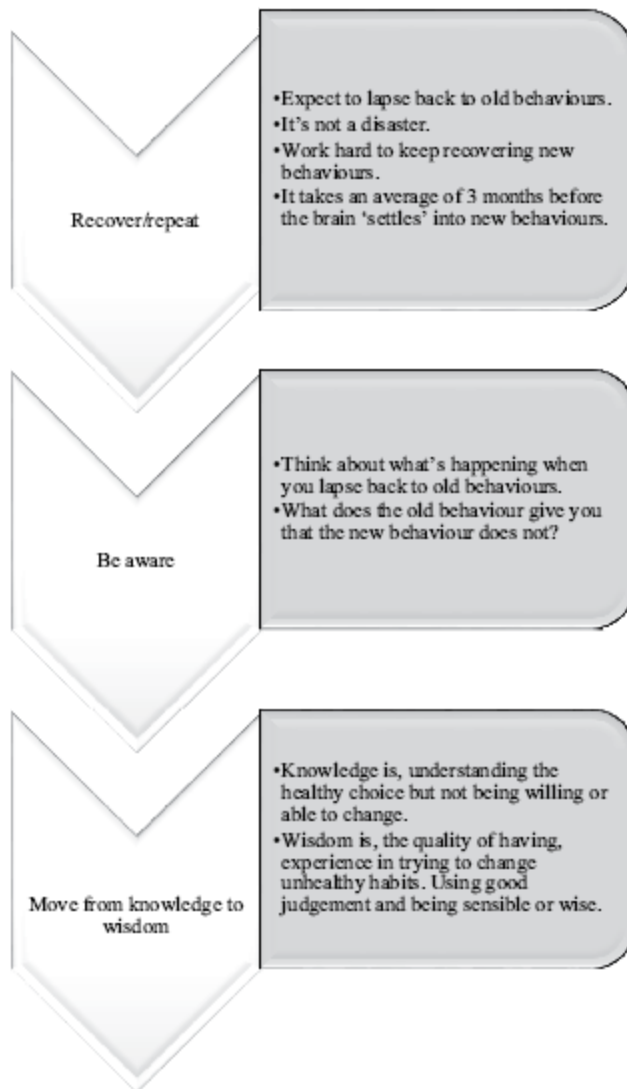
We repeat this; it becomes impulsive to repeat this behaviour whenever there is a trigger (10)

It becomes a habit when you are no longer aware of the trigger and do the unhealthy behaviour without thinking (11).

Changing habits takes planning

The process is...





Consider the **positive traits in your personality** that will help you change established habits.

Examples:



If you like to write lists, keep appointments or schedule your day use these skills to start planning what you will eat and when each day. This brings order into eating and a sense of control over your own body.



Exercise is a great replacement for alcohol or overeating because it releases endorphins. Endorphins are natural chemicals released by your brain that make you feel good. They lift your mood by making you feel more positive and confident. Plus, being more active burns more calories and changes the composition of your body to more muscle and less body fat.

Summary – Habits

- ❖ When people see food, they may not feel hungry but end up eating because they like the taste or want to 'fit in' with other people.
- ❖ Think about eating habits that happen every day. The times that you eat, times that you are active, times that you drink alcohol. All humans have patterns of behaviour that are repeated.
- ❖ **Change is possible when people understand the reality of their behaviour and plan what to do differently.**

Chapter 4

Meaning and Purpose

Purpose – ‘The reason for which something is done. A person’s sense of determination’ (1).

People try to lose weight by restricting what they eat and exercising, only to give up the exercise and return to old eating habits. **These changes would have been competing against years of established eating and activity habits.**

If people want to change their eating habits it helps if the new healthy behaviours are supporting something they care about. This gives ‘**meaning and purpose**’ to changing the way a person eats rather than being on a ‘diet’.

What do you care about?

- Have you gained body fat and feel certain that you want to lose it?
- Do you remember what you looked like when you were slimmer?
- Are some of your clothes too small? Want to wear them again?
- Have you been diagnosed with a health problem that would improve if you lost weight?
- Do you know someone who has health problems or someone who died? Has this motivated you to take better care of yourself?
- Do you care about the environment and climate change and want to change the food you buy and the way you travel to help prevent global warming?
- Do you care for animals and are against cruelty so would value being a vegetarian or vegan?
- Do you want to live a long life and have quality of life?

Quality of life means a state of physical, mental and social well-being. No disease or physical or mental problems that limit the way you want to live.

- Does religion or faith give spiritual guidance to care for yourself as much as you would care for others?



Benefits of being a healthy weight (2)

Health Benefits

Reduces High Blood Pressure

Improves Cholesterol levels

Reduces risk of type 2 diabetes

Improves control of blood glucose levels if you have type 2 diabetes

Lowers risk of death from cancer, diabetes or heart disease

Improves lung function in asthma

Personal Benefits

More energy

Fit into smaller clothes, so more choice

Movement takes less effort. Able to be more active with your family and exercise is easier

Feel fitter

Sleep improves

Don't feel so hot, sweat less

More likely to live longer

Reduces osteoarthritis (loss of cartilage around knee and hip joints) Breathing is easier

More stable blood glucose levels



Psychological benefits of being a healthy weight (2)

Increased self-esteem

Reduction in depressive symptoms

Improved body image

Improved quality of life

More likely to socialise

Lower levels of anxiety

Physically capable of being more active so can gain the psychological benefits of exercise

Releases natural feel good hormones endorphins



Reminder of Healthy Habits (2)

1. Eat lots of fruit and vegetables. 5 to 8 portions a day.
2. Don't smoke or give up for at least 5 years.
3. Regular exercise – 5 to 7 hours a week.
4. Drink in moderation – 1 to 3 units a day. Limit to 14 units in a week.
5. If you are overweight BMI 25–29.9. If you do all of 1 to 4 healthy habits, you will be at lower risk of early death. The same as people who are a healthy weight BMI 18.5 to 24.9.



What is a healthy weight?

Weight or clothes size does not take into account a person's height. So, weight is usually converted to body mass index or BMI; **weight (in kgs)/height (m²)**

Standard World Health Organisation classifications for BMI (12)

BMI

<i>Healthy weight</i>	18.5–24.99
<i>Overweight</i>	25–29.99
<i>Obese</i>	30–39.99
<i>Morbidly Obese</i>	40 and over

A better way of judging how much body fat you have is from your waist measurement.

Knowing your BMI is helpful, but waist measurements of more than 40 inches or 102 cm for men and 34.5 inches or 88 cm for women put people at risk of serious health conditions. Research has linked too much 'belly' fat with a greater risk of developing heart disease, high blood pressure, stroke, cancer and type 2 diabetes (12).



To measure your waist, feel the bottom of your ribs and the top of your hips. In the middle of these two points wrap a tape measure around, breathe out naturally, relax, then take the measurement.

UK recommendations

It doesn't matter what clothing size people fit into or how tall they are, it is beneficial to health to lose belly fat to measure...



Less than 37 inches or 94 cm for men

Less than 31.5 inches or 80 cm for women

Guidelines for people of Black African, Middle Eastern, White European and mixed origin.



Less than 35.4 inches or 90 cm for Men

Less than 31.5 inches or 80 cm for Women

Recommended healthy waist measurement for people from African Caribbean, South Asian, Chinese and Japanese origins.

African Caribbean, South Asian, Chinese and Japanese people tend to carry more fat and less muscle, so the risk of diabetes, heart and circulatory diseases starts to increase at a lower weight than for Black African, White European, Middle Eastern and Mixed origin people.



Top 5 causes of premature* death UK (13)

1. Cancer
2. Ischaemic heart Disease and stroke

Unhealthy Habits most likely to cause disease

Smoking



3. *Lung Disease – Influenza, pneumonia, chronic lower respiratory diseases*
4. *Liver disease – alcoholism or fatty liver* Alcohol and/or obesity
5. *Dementia and Alzheimer's disease*

**Premature is dying before the average age of death in a population.
In 2019, England life expectancy in years – Males = 79.9, Females = 83.6*

**Health brings a freedom very few realise,
until they no longer have it**



You have one life one body

Summary – Meaning and purpose












- ❖ Choosing a lifestyle that strongly supports eating healthy foods and being more active gives a 'clear' reason and purpose to stick to new habits.
- ❖ Other people are more likely to support you with healthy behaviour changes because they can identify with the purpose and meaning of your lifestyle.
- ❖ If your purpose is to be healthy because of a physical or mental problem, recent bereavement or as part of caring for animals or the environment, you will be more determined to avoid unhealthy food choices.

Chapter 5

Exercise

'Activity that requires physical effort, carried out to sustain or improve health and fitness' (1).

How exercising helps your body (14)

Clearer thinking 		Releases 'endorphins' 
Clearer complexion look younger 		Better sleep. 
Lower heart rate 		Muscle strengthening and definition 
Lower blood pressure 		Builds or maintains muscle, lose body fat 
Stronger bones 		Stronger immune function 

<p>Muscles support joints</p> <p>better</p> 		
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Think about your lifestyle

On a typical weekday and a day at the weekend.

- ❖ How much time would you spend on your feet moving around?
- ❖ How much time do you spend sitting?
- ❖ How much time do you spend sleeping?

Add it up in rough hours.

There are 24 hours in a day. Start planning how **one** of these hours could be dedicated to exercise.

If you are thinking I cannot fit exercise in, I am too busy in the day and too tired by the evening, look at the reality of how you spend your time. It's unlikely you can add in an hour of exercise because you do not believe you have free time. Think about whether you could swap or drop something out to exercise? Could you combine socialising with exercise; going for a walk or bicycle ride or attend an exercise class with your partner, friend or family.



Suggestions

Consider swapping 1 hour of screen time, TV, Netflix, phones, iPad/tablets, laptops, computers **for exercise**.

If you work long hours, 10–14 hours a days, could you build activity into your day by walking to or from work? Could you get up earlier and do an **exercise routine before work or the school run**?

What about **joining a gym, could you do a class before you go to work**. If your job is mentally demanding, exercising early morning before work is reported to **lower 'stress' hormones (adrenaline and cortisol)** during your workday. This helps to prevent some of the aging and weight gain effects of a

demanding work life. Workers who go to the gym are said to be 'burning off the adrenaline'.

Which exercise?

Yoga, Pilates or body balance would suit people who have physically demanding jobs, where people are on their feet most of the day, having to move around a lot or any jobs that involve lifting.

A Yoga session is mainly muscular exercise. It also calms the part of your brain that makes humans feel anxiety, so would suit people who feel mentally and physically drained at the end of a workday, such as carers, nurses, doctors or mental health workers.

Yoga involves deep breathing with muscular movement. It would be beneficial for people who have difficulty breathing (asthma, COPD, smokers).

If your job involves sitting down most of the day, any regular activity that gets you moving and raises your heart rate will improve your health.

Do you find it difficult to self-motivate? Look at exercise classes in your area. Start going with a friend or partner to build your confidence and to establish exercise as a routine part of your lifestyle.

What if you hate exercise?



What do you hate?

- ❖ Getting out of breath or feeling tired quickly?
- ❖ Does your heart rate feel too fast?
- ❖ Do you dislike getting hot and sweating?
- ❖ Feel uncomfortable in 'gym gear'?
- ❖ Do not like exercising surrounded by other fit people?

These are problems of being overweight and unfit. All of these problems will be solved if you commit to being more active and lose excess body fat.

The human body is brilliant at adapting to exercise. A person's fitness level will improve within a month if they exercise at least 3 to 4 times a week.

If you don't want to join a gym or do any sports, then be more active whenever you can and do not set yourself goals that you cannot stick to because it may give you a sense of failure. Any increase in activity is better than being inactive. Maybe start by walking every day or exercising at home.

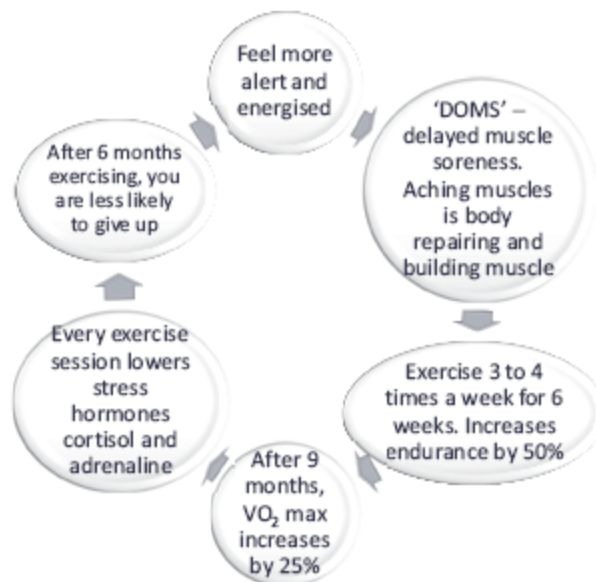
The trouble with losing fat is when people decide 'I want to lose weight', they want fast results. This is more likely to drive people to severe food restriction with bursts of exercise that only last for a few weeks.

In the UK, there are almost 10 million gym members. So, one out of every seven people has a gym membership.


Anyone who has been a member of a gym for a while knows it is very busy from New Year to about March then attendance starts to decline, by June half the people who exercised in January no longer attend; there are reasons for this (see history section).

Plan exercise when you are most likely to do it

What happens to the human body with regular exercise (15)?



- **VO₂ max** is the speed your body transports oxygen. Increasing your VO₂ max means you can exercise more intensely for longer.
- We '**burn off**' the stress hormones **cortisol and adrenaline** with exercise. This reduces feelings of anxiety and depression during the day particularly if you can exercise first thing in the morning.

UK Chief Medical Officers 2019 (17) 

Guidelines for adult exercise each week are:

Recommends **2 ½ hours of moderate intensity exercise** (*breathing and heart rate increase, feel warmer, can still hold a conversation*) such as brisk walking.

PLUS 1 ¼ hours of high intensity exercise (*high heart rate, feel hot, sweating, breathing more rapid, difficult to hold conversation*).

AS WELL AS 2 days of workouts that strengthen and condition muscles; weight training, callisthenics, yoga, Pilates.

US Department of Health (16)

150 minutes or 2 ½ hours of moderate intensity exercise

PLUS 75 minutes or 1 ¼ hours of vigorous activity

AS WELL AS strengthening activity, muscular exercises on two days a week

As you can see, it is the same recommendations in the UK as it is in America.



This is 6 hours of activity in a week. Depending on how you fit the 6 hours of exercise into your life; plan at least one muscle rest day.

Exercise on its own does not result in much weight loss

Exercise changes the composition of the human body. This means we gain muscle and lose fat, which is much better for your health. The weighing scales may not show much actual loss, but your clothes will be looser as muscle is dense so holds a tighter firmer body shape. Plus, muscles are 'calorie burning' cells so as you gain muscle, you will use up more calories more efficiently through the whole day.

Humans have evolved a large brain that is adaptable and can coordinate complex movements

There is a powerful connection between the health of your brain and movement. It has been reported that regular exercise primes your brain to learn faster (20).

Exercise increases dopamine storage





Dopamine is a 'feel good' hormone. Higher levels have been associated with increased motivation and focus. When dopamine and serotonin levels are low, we feel depressed.


It is widely recognised that exercisers feel less depressed (21).

Have a look at the exercises listed, see which would suit you. If you stick to just one or two types of exercise, the ability to change your body shape will be limited. Human bodies quickly adapt to any physical demands put on them. So, we need to 'mix up' exercise to challenge different muscles. This works better to develop an athletic body shape.







If people train a lot in one particular exercise, their body adapts, and the muscles are shaped to be able to do those movements well.

Examples:

-  Marathon runners keep skinny and light because it's easier to run fast for a long distance if you don't weigh much.
-  Rugby players, wrestlers and weightlifters are large, muscly and powerful because they have to grapple with other large, muscly people or lift heavy weights to compete in their sport.
-  Swimmers have a strong all-round muscly shape because they have to move their body weight against the resistance of water.
-  Cyclists have large, powerful, leg muscles with weak upper bodies because all the energy to drive the bike is from the legs.


-  Yoga or Pilates is a mainly muscular exercise that works the whole body. Because it involves a lot of stretching, muscles are strong and flexible so look toned without building bulk.

Consider doing a mixture of these exercises

Exercise	Benefits to body	Rate of calorie burning
Walking 	<ul style="list-style-type: none"> • Heart and lungs (cardiovascular) • Endurance • Works leg muscles 	<i>Moderate during walking</i>
Jogging or running 	<ul style="list-style-type: none"> • Heart and lungs (cardiovascular) • Endurance • Works most muscles 	<i>Fast whilst running or jogging</i>
Cycling 	<ul style="list-style-type: none"> • Heart and lungs (cardiovascular) • Endurance • Works leg muscles 	<i>Fast whilst cycling</i>
Weight training 	<ul style="list-style-type: none"> • Muscle building • Strength 	<i>Burns calories less intensely than cardiovascular exercise</i>
Interval training – short bursts of high intensity exercise 	<ul style="list-style-type: none"> • Heart and lungs • Muscle strength and endurance 	<i>THEN increases calories used by body over the whole day</i>
Swimming 	<ul style="list-style-type: none"> • Heart and lungs • Muscle strength and endurance 	

Yoga, Pilates,

Body Balance or

Tai Chi 

- Muscle strength and flexibility
- Mentally calming

Cardiovascular exercise is aerobic

Aerobic means it uses up calories and oxygen quickly. So, cycling or running would make our heart rate increase and breathing more rapid to get more oxygen into the bloodstream.

Muscular or anaerobic exercise

Involves short bursts of intense muscle movements; lifting your own body weight as in yoga or lifting heavy weights in weightlifting. **Anaerobic exercise** burns less calories during the activity when compared to **aerobic activity** (running, cycling). After anaerobic activity, the body burns more calories when you are resting.



Duke University (18) completed a study where they asked 119 people who were overweight to do either cardiovascular exercise or weight training or a mix of both.

This is what they found...

The people who did aerobic training lost weight. The weight change was measured and found to be a mix of fat, water and muscle tissue.

People who only did weight training with no aerobic exercise gained weight. This was measured and reported as a gain of 2 lb of muscle.

The people who did both weight training and cardiovascular exercise showed the best improvements. They lost weight, maintained muscle mass and lost belly fat (reduced waist circumference).

The **Duke University study recommended** doing weight training first and then cardiovascular exercise. The weight training drops your stores of glucose so your body switches to use more fat for energy during cardiovascular exercise.

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ate, they may be resistant or contemptuous of dietary change. Some individuals would put up barriers or sabotage discussion with the dietitian. For example, most people would give you an account of what they typically ate on a 'good' day or 'diet' day. I would discuss changes to their eating that would help, which would be blocked by comments 'I tried that it didn't work', or 'I didn't lose weight'. Others would not see how what they ate could change because someone else did the food shopping and prepared meals. Some denied ever snacking, which is unlikely especially if you consider the liquid calories that go in hot drinks with milk, fruit juice drinks or biscuits with a tea or coffee.

The point of this is **not** to moan about people trying to lose weight. It's to emphasise that no dietary advice is any help if you do not feel ready or willing to change the way you eat.



Knowing what you should eat and what you should avoid does not necessarily make you do it.

People crave the 'pleasure' hit from eating sweet and fatty foods. The drive to eat is your brain chasing that feeling. This powerful dopamine lift only lasts with the first few mouthfuls of food or the first 1 to 2 units of alcohol. After that, it's downhill; you're either left feeling guilty about the amount of food you just ate or getting drunk.



Your past eating and activity habits have made you overweight, and your current habits prevent weight loss.

Individuals can only lose body fat if they are willing to change their eating, drinking and activity behaviours. Otherwise, overweight or obese people will stay the same weight and are more likely to gradually get fatter as they age.



The most important step to a healthier lifestyle with a leaner body is to take full responsibility for everything you choose to eat and drink.

Have a look at these stages of change (22, 23)

Can you relate to any of the behaviours in these stages?

You may not be in one spot, more likely to be moving backwards and forwards over 2 or 3.

Pre-contemplation 'No not me'	Contemplation on 'Well maybe'	Determination / Preparation Okay, so what do I do now?	Action 'Okay, let's do this'	Maintenance 'It is possible'
Eats what you want when you want	Becomes aware of the negative effects of being overweight	Wants to lose body fat Understands pattern or triggers, behaviour and reward	Uses meal plan or food diary to set up daily food intake	Able to choose foods because they are healthy
Eats when feeling emotional or is *triggered	Interested in the personal benefit of losing fat	Establishes ways to change old habits	Journals thoughts and feelings that occur around mealtimes	Plans and serves balanced meals and enjoys the taste
Gains pleasure from food and feels better whilst eating	Got some idea of the changes that need to be made	Creates a meal plan to use as a strategy	Starts to include 'healthier' food choices	Able to ignore 'hunger pangs' between meals and planned snacks
Keeps eating beyond feeling 'full'. Stops at 'Stuffed'	Feels uncertain how to cope with feeling hungry	Identifies interfering behaviours that 'trigger' old eating habits	Plans controlled social eating	Knows when and where to nourish herself/himself healthily
Eats snacks and leftovers, nibbles at food when alone or in secret	Begins to consider what it would be like to eat less, eat healthily and exercise	Anticipates and prepares for challenges and triggers Speaks to people who are willing to help and asks for their support	Asks for help and support from family and friends	Feels comfortable eating in a controlled manner in social settings
Thoughts are preoccupied by food. Feel				

strong urges to eat

Fears not having food available to eat

Keeps structured mealtimes	Able to maintain meal and snack routine that meets their energy needs
Starts recognising and 'sitting with' and not acting on the drive to eat more.	Requests support when needed
Practices 'surfing' the urge to eat.	

Relapse
'Here we go again'

- Can occur at any of the stages
- People may find themselves moving backwards and forwards through the different stages
- Cycle of change may need to be repeated several times on the journey to healthier eating habits
- Understanding your triggers to overeating and how you can change these behaviours means you will move yourself out of pre-contemplation and contemplation quicker.
- Recognise the stage you are at, plan how to move forward and ask for support.

***Trigger feelings** – Happiness, sexual frustration, fear, anxiety, 'bad' day, tired, lonely, low mood, depressed, eating as part of entertainment and socialising (watching TV, films, takeaways, restaurants).

Summary – Support

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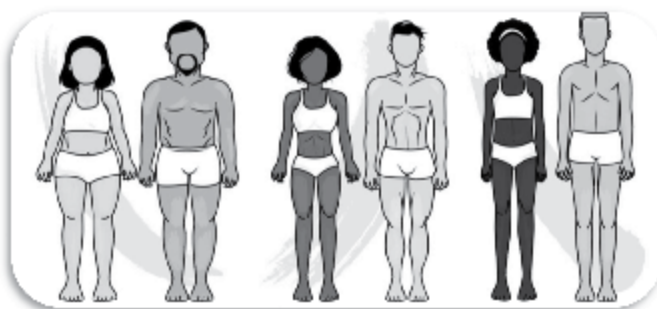
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Chapter 7

Body Shape

Which genetic body shape is most like you? (24)



Endomorph

Mesomorph

Ectomorph

Endomorph

Build is stocky with thick legs and arms and a rounder body. Thick rib cage with hips as wide as the shoulders. Naturally muscly and strong. Can gain muscle easily but can also gain fat. If Endomorphs become overweight, fat will build up under the skin over most of their body not just around the abdomen (belly fat).

Mesomorph

Body shape is rectangular with wide shoulders and a narrow waist.

Naturally have a muscly build and are able to do any exercise or sports. They can lose or gain weight depending on how much they eat and how active they

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Chapter 9

Why Does Fatigue Matter?

Fatigue is the feeling of being physically and mentally tired.

Everyone gets tired its natural.

Fatigue is different from feeling drowsy or apathetic

Fatigue is:

Reduced or no energy

Physical or mental exhaustion

Lack of motivation

Made worse by one or more of...

Strenuous exercise or a physically demanding job



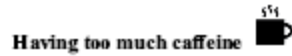
Emotional stress: anxiety, depression, caring for others, a mentally demanding job



Boredom



Lack of sleep



Drinking too much alcohol, makes you feel tired and hungry
Once effect of alcohol has worn off it has a depressive effect on mood



Eating lots of ready made, high calorie snacks and takeaway food especially
late at night

Body has to deal with digesting food and storing energy when it should be
resting



Eating less than your body needs to function well (dieting or disordered
eating) and doing regular intense exercise



If your current lifestyle involves several of the behaviours listed above, you
probably suffer with fatigue, felt most strongly in the evenings, especially at the
end of the week.

Fatigue is a problem if you want to lose weight because it's difficult to feel
motivated to change eating and activity behaviours if you feel physically and
mentally drained. Plus, fatigue is more likely to keep someone trapped in a cycle
of trigger, behaviour, reward.

So...

When humans restrict what they eat, there is rapid weight loss for a few
weeks. Then the rate of weight loss slows as the body gradually lowers its
metabolic rate to conserve loss of energy. Your body does this because it is
responding to a state of prolonged starvation or 'famine'. It adapts to use less

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Chapter 10

How to Control Your Desire for Food (Appetite)

Hunger is the physical need for energy (food)



After we wake up, our body needs extra energy for movement and our brain uses more energy to be alert and have clear thoughts. A combination of the brain and hormones (*chemical messengers*) stimulate the desire to eat every 4 to 6 hours when we are awake. This is the **hunger cycle**.



Ghrelin

The main hunger-stimulating hormone. It is secreted from the **stomach** and circulates to your brain where it **triggers the drive to eat**. When the stomach is empty and blood sugar is low, and when people haven't eaten in several hours, the stomach produces more **ghrelin**, this makes us feel hungry.

Leptin

After eating, a hormone called **Leptin** which is made by **fat cells**, works to **reduce appetite**, this stops us wanting to eat.



If the body is sleep deprived (**inconsistent and poor quality**), the level of **ghrelin** rises rapidly, and fat cells produce less **leptin**. This makes you feel hungry and drives you to eat (27).

These body processes are complicated involving a lot of glands and hormones. It's helpful to have some knowledge of what happens in your body, but you didn't buy this book to study physiology so I will just write about the important hormones.

The most important hormone that makes your body store energy is insulin.

Insulin is a hormone.

Made by the pancreas. Special cells called the **Islets of Langerhans produce insulin**. After you eat any food that contains carbohydrate, once digested, it **enters the bloodstream* as glucose**.

**Blood is the transport system for your body driving around the oxygen and nutrients your body needs to live.*



Insulin's job is like a key

It opens up your body cells to let glucose in which is then used for energy. Glucose is very important to your body as the main **fast fuel** for muscles (movement) and your brain (thinking).

There is always a little bit of insulin floating around in our bloodstream 24 hours a day. This stops your blood glucose level getting too high and keeps it at a level the body functions best (3.5-6 mmol/L). Plus, your body can take in glucose for energy whenever it needs it.

This bit is important

When people digest carbohydrate foods, there is a surge in the blood glucose level. The pancreas releases extra insulin to quickly move the glucose from blood into body cells.

When there are higher levels of insulin in the blood, the body switches to 'energy storage mode' and stops releasing stored glucose and fat.

'Energy storage'

After we eat, the body keeps some of the energy (calories) for later by topping up glucose and fat stores. This stored glucose and fat should then be released in-between meals and overnight when you are not eating. This ensures the body has access to energy for body function day and night.

Insulin moves glucose from the blood into body cells.

It does this without any problems if you are a healthy weight and keep active. On the other hand, if your lifestyle means that you sit around most of the day and have become overweight, insulin doesn't work as well. This is **insulin**

resistance. As you gain more **abdominal (belly) fat**, the body **resists insulin** and it's harder for insulin to open up body cells to let glucose enter. **It's like the key no longer fits the lock.**

When **insulin** cannot do its job properly, the blood glucose remains higher for longer after you eat. Your pancreas will keep responding to higher blood glucose levels by releasing more and more insulin until blood glucose goes down to normal.

Your body functions best if it can keep the blood glucose level between 3.5–6 mmol/L. If a person has insulin resistance, it's harder for the body to clear glucose from the blood. Over time, people with worsening insulin resistance can develop **glucose intolerance** and then **type 2 diabetes**.

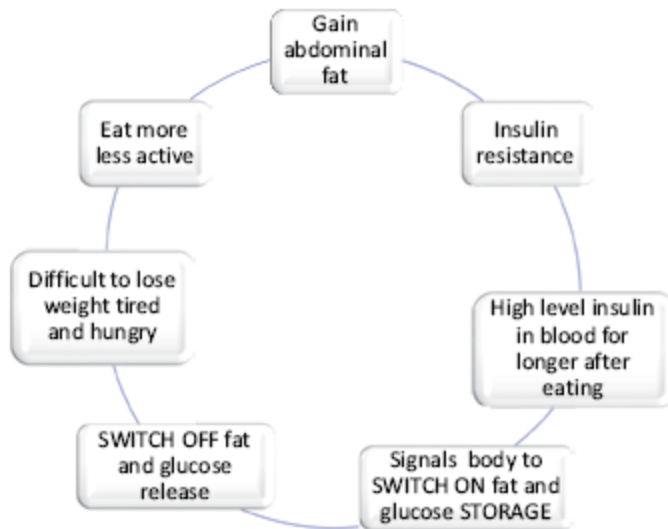


The problem with high levels of insulin in the blood for longer after eating is it keeps the body in a state of 'energy storage'.

High levels of insulin 'signal' the body to stop releasing glucose and fat and to store the energy from any food eaten.

The consequence of this is that one or two hours after eating a person feels tired and hungry again so eats food they do not need. This is because their body has not switched back to energy release and is stuck in storage mode. This creates a vicious cycle of hunger, lack of energy, weight gain. People may feel a sense of despair that they cannot lose weight (28)

Vicious Cycle



**People want to eat all the time and feel tired
because they are overweight**

The way to **break this cycle** is to eat in a way that holds a **stable blood glucose level**.

- Achieved by eating **controlled portions of low GI carbohydrates**
- Planning **balanced meals** and becoming **more active**

Exercise speeds up the release of stored energy (glucose and fat)

Exercise makes body cells more receptive to insulin

Exercise reduces insulin resistance

What causes weight gain and prevents loss of fat?

Regularly eating more calories than your body needs to function

Moving too little

An inactive lifestyle

Responding to hunger rather than trying to control it

Eating what you want when you want

If you have strong emotional triggers to eating

- *Anxiety and depression*
- *Binge eating disorder*
- *Comfort eating*

Do you need psychological support/treatment?

All or nothing thinking

If you eat too much one day – think ‘I’ve blown it’.

Make excuses for yourself to relapse back into old behaviours

Not taking full responsibility for what you eat

Making excuses, blaming family, friends, co-workers, food manufacturers, restaurants, takeaways for giving you too much food.

Most of your social and or work life centres around eating or drinking alcohol

If you have a habit of drinking alcohol most evenings – more than 1 large glass wine 250ml or a pint of beer/lager/ale or double measure of spirit 50ml

How to lower insulin resistance to lose fat

Start being more active

Introduce some regular exercise that you like

Controlled portions of low GI carbohydrate in meals (see what section)

Choose to eat more foods that are known to be beneficial to your health

Don't add extra sugar to drinks or food

No sweets made mainly from sugar

No drinks especially fizzy drinks that contain sugar – includes concentrated fruit juice

Balanced meals and snacks.

Slows speed that glucose enters your blood stream. Need less insulin to deal with it

Plan and stick to structured meals and snacks

Don't eat or drink anything that contains calories for 12 to 14 hours overnight

Best time to fast 19.00 to 07.00

Want to lose weight quickly? Yoyo dieter? 18-hour fast. Eat two balanced meals within a 6-hour period, no snacks or desserts. Stick to weight loss calories. When you have had enough of 18-hour fasting, go back to 12 hours fasting from 7 pm until 7 am, with weight maintenance calories. This will maintain muscle mass, losing bodyfat on the 18-hour fasting days.

Disordered Eating pattern



- **This eating pattern is disordered because it has no structure**
The pattern is restriction with a period of excessive eating. After virtually no food for most of the daytime, their brain will be totally focused on driving them to eat.
- **Restrictive eating triggers cravings for food**

Typically, any time around mid-afternoon to early evening.

The brain drives you to eat because its energy stores of glucose (stored as glycogen) have dropped low over the course of the day. This person will eat and keep eating until all the food is digested. It takes up to two hours to fully

digest a meal. People can consume a lot of calories in two hours. Craving for food won't stop until their brain registers that energy stores are topped up and switches off the drive to eat.

When 'cravings' happen

It's natural to desire foods that are high in fat and sugar because they are energy dense (contain lots of calories).

The trouble with this?

Less likely to select healthier choices that take longer to prepare. More likely to eat ready-made foods at a **fast pace**. People may end up eating more calories over a couple of hours than if they ate three balanced meals throughout the day.

It's easy to get into this pattern with busy work and family lives. Plus, cramming in all your calories in the evening over two to four hours stops you feeling hungry the next morning, so continues the same pattern of disordered eating.

If this disordered pattern of eating continues, it could lead to **binge eating** where the person has a **sense of no control over the amount they eat**. Even though eating is a great pleasure, binges leave people feeling guilty because of the loss of control and fear of weight gain. This is more likely to keep you in the **cycle of restrictive dieting in the daytime with overeating in the evening**.

The evening is the worst time to consume a lot of food because people are tired at the end of the day and more likely to sit on the sofa for several hours and then go to bed.



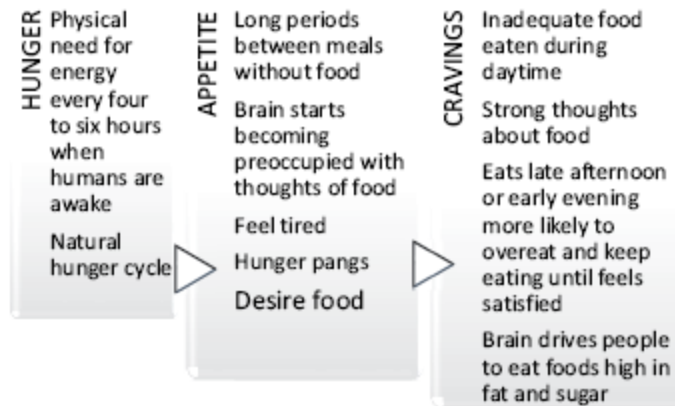
Important

While we sleep, the human body deals with **repairing damaged cells, getting rid of waste products and building new cells** because it does not have to prioritise thinking and movement.

The body's natural restoration processes will be limited if it is dealing with digesting and storing of food late evening or during the night.

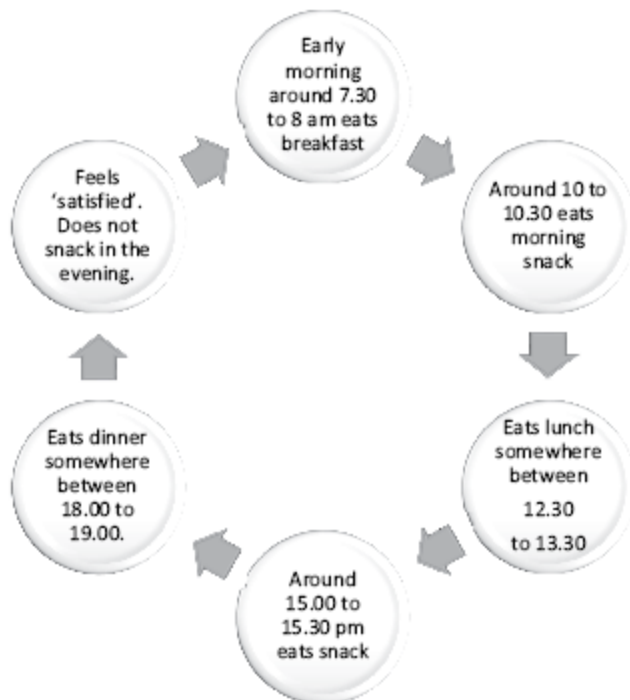
Try to get a routine of eating and do not eat too late too often. Ideally, no food after seven in the evening; *see fasting*.

If a person eats when they feel like it with no structure, their brain is more likely to move from **hunger to appetite to cravings**



When you are craving food, it's very difficult to stop yourself from overeating.

Example of a Structured eating pattern



A simple routine of eating will give this person's body the energy and nutrients (protein, vitamins and minerals) that it needs to function well. Because this person has eaten at regular intervals around the 4- to 6-hour physical need for energy cycle, they have satisfied hunger and are in control of their appetite. This person is more likely to maintain a stable weight, lose body fat and gain muscle if they are more active.

If you travel to any country in the world, the majority of the population will have an eating pattern of two or three meals a day. If they eat only one or two small meals, this is unlikely to be by choice, rather the result of poverty.

Two to three meals a day with one to two snacks in-between meals gives people the energy they need to move around, think clearly and get work done.



Reminder – the human body has evolved to tolerate restrictive eating for short periods, about three to four months after that fatigue sets in.

Think about your routine of eating. Write down what you eat and when for a few days, this will show you the reality of your eating pattern.

Summary – How to control your appetite

It can become a battle of will power to keep dieting

- ❖ Eating regular meals make fat cells release **Leptin**, which **reduces your appetite**, so you eat less.
- ❖ Eating regular meals at similar times reduces the amount of **Ghrelin** secreted from the stomach, so people **feel less hungry, eating less food**.
- ❖ Getting **consistent quality sleep** stops the level of **Ghrelin** rising. This stops a person feeling so hungry.
- ❖ **Controlled portions of low GI carbohydrate** foods keep the level of **insulin** low in blood. This means the body can **switch quickly** from **storing** glucose and fat after a meal to **releasing** it

If you feed your body properly, it will settle into a pattern of eating and regulate the amount you eat. You won't need to diet any more.

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insulin like growth factor (IGF-1). IGF-1 promotes growth of body cells, especially skeletal muscle.

This means, fasting protects muscle mass and switches your body to using body fat as its main source of energy.

Want to lose fat fast?

Try **fasting for 18 hours**. This means no food, only water or drinks that are calorie free. Eating two meals within a six-hour period during the daytime; no snacks, no desserts.

Evidence is accumulating that eating in a six-hour period and fasting for eighteen hours can trigger a **metabolic switch** from **glucose-based** (carbohydrates and protein) to **ketone-based** (fat) energy; with decreased inflammation, increased longevity and decreased incidence of diseases including cancer (53).

18-hours too long?

If eighteen-hour fasting does not work for you or you gave it ago but ended up eating. Then **12-hour overnight fasting** is beneficial and achievable.

- 12-hour overnight fasting helps to control your appetite during the daytime, maintains muscle mass, and helps keep off any lost body fat.
- The optimum time for overnight fasting is **seven in the evening to seven in the morning**. See if you can manage **14 hours** on some days in the week.
- This is not always possible if you work late or eat out in the evening, so if dinner is later, you should still do the full **12 hours fasting**, for example, finish eating around 9 pm, do not eat anything until after 9 am the next day.
- Digesting food is demanding on our bodies. After we eat, the priority is to use the energy from the food for body functions for two hours and any excess food energy is stored for later.



Reminder – the more we spread eating out over the day, the longer our bodies need to switch on energy storage and switch off energy release. Bodies need at least 12 hours overnight with no food to switch to releasing stored body fat for energy (54).

During sleep, our body regenerates by building new cells, getting rid of old or dead cells and waste products. It manages this efficiently if it's not having to deal with digesting and storing energy from food.

When the body uses fat for energy

The breakdown of body fat releases **ketone bodies**. **Ketone bodies** have an effect of **suppressing your appetite**. Once the body is using more stored body fat for energy, hunger will feel weaker around mealtimes, with a quicker sense of satisfaction after eating lighter meals or snacks. This keeps the body in a natural four to six-hour hunger cycle with **internal triggers**, signalling the physical need for energy. When the body is releasing stored fat, it suppresses appetite and, more importantly, stops us from craving foods high in fat and sugar.

Overnight 12-hour fasting is hard for the first two to three weeks; you will go to bed feeling hungry. **Be determined**, your body will get used to not eating after 7 pm and your brain will stop thinking about food in the evening.

Fasting means no food or drinks that contain calories, so that includes alcohol and milk in tea or coffee.

❖ **Fasting is beneficial for twelve hours overnight every day.**

If you are successful in sticking to this, you will lose up to ½ a stone or 7 lbs of fat in the first few weeks. This helps lower insulin resistance and helps suppress appetite in the daytime.



Reminder – If you want to lose body fat quickly, say for a special event and feel you can be disciplined, then **increase the fasting period up to 18-hours**.

- This means **no food at all, or drinks that contain calories for 18 hours once a day**
- Then eat two balanced meals within a six-hour period (see balanced meal section): no snacks, no desserts
- Do this for as long as you can tolerate it
- Then go back to overnight fasting for 12 hours from 7 pm to 7 am, with three balanced meals or two balanced meals, with one or two snacks between meals.

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Chapter 12

Ordered Eating

Ordered eating is normal eating.

So, what's normal?

Definition of normal is *'in a typical or structured way' (1)*.



Reminder – the natural hunger cycle is every four to six hours once we are awake. If we give our body what it needs to function well, it will regulate consumption for us. We won't feel deprived of food or yoyo from restriction to overeating.

Write down examples of what you eat and when on a typical day; one weekday and one day over the weekend. This helps to focus on the reality of your eating pattern.

Do you have ordered or disordered eating?

If your life is busy or chaotic, with food fitted in around the demands of work or family. It would be wise to plan realistic time windows when you are most likely to be able to eat.

If you are thinking 'I can't do that' then you may not be ready to change eating habits.

**Remember that your lifestyle and eating habits are keeping you
overweight**

Change is difficult but not impossible

Speak to the people closest to you and ask if they are willing to make some healthy changes to the way they eat so you can support each other.

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Chapter 13

Foods You Can Swap for a Healthier Alternative

No one is perfect. When foods are banned or considered 'bad' or only for treats, we deprive ourselves of meals, snacks and desserts we enjoy. Rather than banning foods, consider swapping to an equally tasty healthy alternative.

**Foods that need swapping
for healthier alternatives**

Why and What

AVOID

**Sugary drinks especially
fizzy drinks.**

**Adding extra sugar into
drinks or on food.**

**Foods that are mainly made
from sugar, sweets.**

**Foods that have sugar as the
first or second listed
ingredient. Includes some
breakfast cereals.**

Why?

These are **fast carbohydrates** – Raise your blood glucose level rapidly, needs a lot of insulin to deal with it.

Instead

Tea or coffee with no added sugar, water, herbal teas and slice of orange, lemon or lime to a glass of water. Drink milk or have a cappuccino or a latte as a snack.

Small amounts of high sugar foods added onto other sugar free foods are okay, such as teaspoon of jam or honey on natural yogurt or porridge.

Small bar or a few squares of a good quality chocolate

AVOID

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especially if you want to reduce your carbon footprint and are against cruelty to animals.

Summary – Foods you can swap for a healthier alternative

- ❖ Cut out sugary drinks and foods that are made mainly from sugar. Allow your taste buds to get used to food and drinks without added sugar or sweeteners
- ❖ No concentrated fruit juices. Daily limit of one glass, 200ml, fresh juice or smoothies
- ❖ No foods with added glucose fructose corn syrup; check listed ingredients on packaging
- ❖ Swap the starchy carbohydrates you eat the most often (rice, bread, potatoes) for a low GI alternative
- ❖ Choose to eat fats in their most natural state; not cooked at high temperatures or processed
- ❖ Buy the best quality food products you can afford
- ❖ Give up eating sweets and chocolate that are made mainly from sugar (1st ingredient listed).

 If you struggle to give up intensely sweet foods, **fast for 18-hours for one day. Eat two balanced meals within a 6-hour period; no food or drinks that contain sugar for 24 hours.**

This works to reset your taste buds.

After a fast, taste buds will become more **sensitive to subtle flavours** so you can start to **enjoy healthy foods again.**

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Beans, peas and lentils source of protein for vegetarians and vegans

Add substance and texture to a meal. High in fibre, 'filling'

Any Fish

Excellent lean protein, healthy fat especially omega-3 in oily fish

Meat on the bone, cuts, joints or fillets (not cheap processed meat)

Source of protein, iron and B vitamins; digests slowly, gives filling and satisfying feeling in stomach

Any nuts and seeds

Packed with vitamins, minerals and healthy fats.

(except for nut allergies) nuts are beneficial to health.

Cows milk, cheese and eggs

Dairy foods are high in protein, calcium, B vitamins and minerals. A glass of milk is low calorie low fat and nutrient dense

(low GI food)

The quality of protein in any food is compared to the protein in egg

All vegetables – it's common for some people to dislike the taste of vegetables. Children have immature taste buds so are less likely to enjoy vegetables

As Children grow into adults and experience different foods and flavours its normal to develop a taste for a wider variety of vegetables and fruit

If you are an adult 'fussy eater' stick with the vegetables and fruit you do like and include them in your meals

Vegetables can be hidden and enhance the flavour of a meal if its mixed in – stews, casseroles, sauces, pasta sauces

Roasting vegetables tends to sweeten them which makes the taste more appealing. Add gravy, sauce or season

Sometimes the texture of hard vegetables puts people off or they may find it difficult to chew or swallow hard food – vegetables soften if they are cooked in stews or casseroles or canned

All fruits – try to eat the whole fruit when possible.

Any of the fruit is better than no fruit so if you prefer it peeled or stewed or tinned or a smoothie it's still beneficial to your health.

Common foods that add flavour, believed to have health benefits

Garlic (31) – Known for centuries for disease fighting properties. Contains Allicin reported to lower blood pressure and LDL cholesterol (LDL is risk factor for heart disease)

Seaweed – Low calorie, salty, crunchy. Source of protein, fibre and many vitamins and minerals. Small amount of fat is omega 3.

Ginger – long history of traditional/alternative medicine. Used to help digestion, reduce nausea, fight flu and colds

Blueberries – Low GI, adds flavour and colour. Low in calories. High in antioxidants, believed to help protect against aging and cancer.

Kale – mainly protein and fibre. Contains a lot of vitamins, minerals and antioxidants (*stop free radicals that damage cells*) very low calorie content. Small amount of fat is omega 3

Turmeric – contains curcumin helps prevent heart disease, alzheimers and cancer (32, 33). Anti-inflammatory and antioxidant. Thought to improve symptoms of depression and arthritis

Summary – Which Foods are Healthy and Why?

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Reminder

- ❖ The stomach and digestive enzymes made by the liver break food down to tiny pieces so that we can absorb it through the bowel wall.
- ❖ When carbohydrate foods such as wheat and corn are ground down to a fine flour or sugar is extracted from sugar cane, these will be digested very fast because the gut does not have much work to do.
- ❖ High GI foods are quick to digest so cause a rapid surge in your blood glucose level, matched with a rapid surge in insulin. **High insulin levels in the bloodstream switch off fat and glucose release and switch on storage of glucose and fat.**
- ❖ **High GI carbohydrates give a 'fast surge' of glucose energy which then drops as excess insulin moves it out of the blood into body cells. When a rapid surge in blood glucose drops back down, a person feels tired and hungry which drives them to eat again to get an energy lift.**

Sugar and high GI starchy carbohydrates are *fast carbohydrates*

***Fast carbohydrates* keep people in a cycle of feeling tired and hungry who gain weight easily and struggle to lose it**

Summary – Carbohydrate Foods and the GI (Glycaemic Index)

If you want to lose fat

- ❖ Cut out fast carbohydrates.
- ❖ Fast carbohydrates are any drinks that contain sugar, foods that contain mainly sugar where sugar is listed as the first ingredient, high GI starchy carbohydrates (foods made with white flour).
- ❖ Eat two or three regular meals every day.
- ❖ Eat at similar times every day. Once you are awake, do not leave it longer than six hours between meals.

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Starch is how plants store energy. The building blocks of starch is glucose. It does not taste sweet to us but when we digest it by breaking down food, it releases glucose.

Sugar is stored in plants as energy. The most farmed plants to produce sugar are sugar cane and sugar beet.

All carbohydrates give us sugar in the form of glucose. *We absolutely need glucose. Our brain and muscles function best with carbohydrates included in your diet.*

Slow carbohydrates (low GI) are the best choice.



Reminder – the amount of carbohydrate you need, especially fast carbohydrate (sugar or high GI starchy foods) depends on how active you are.



If your lifestyle is **inactive**, you do not need fast carbohydrates. Better to swap for controlled amounts of starchy low GI carbohydrate.



If you are obese (BMI greater than 30) and/or have type 2 diabetes or Polycystic ovary syndrome, **you should avoid** fast carbohydrates.

Swap Fast Carbs foods for Slow Carbs

<u>Examples:</u> High GI 'Fast carbohydrates'	Swap for low GI alternative 'Slow carbohydrates'	Swap for lower calorie, low GI alternative
Breakfast cereals Any processed (ground down and formed into shapes) Cornflakes Frosted flakes Coco pops	50g Muesli with fruit and/or nuts 50g Porridge 40g Multigrain flakes 50g Granola with fruit and/or nuts Shredded wheat X 2	30–50g portion of porridge oats served with fruit and milk or natural yogurt 2 egg omelettes

<u>Examples:</u> High GI 'Fast carbohydrates'	Swap for low GI alternative 'Slow carbohydrates'	Swap for lower calorie, low GI alternative
Rice Krispies Fruit and fibre Honey nut loops Crunchy clusters Puffed wheat Weetabix	40g Bran flakes with oat 40g Any high bran cereal – All bran <i>Dry weight</i>	1 slice granary bread with 2 eggs or lean bacon 2–3 slices 2 Rye crispbreads with low fat cream cheese or cottage cheese or 2 heaped teaspoons of a nut butter Sliced apple with 2 tsp nut butter
Rice	Basmati rice Wild rice Brown rice Risotto rice Bulgur wheat Couscous Quinoa <i>All 60g dry weight before cooking</i> <i>Or portion to 1/3 of meal plate</i>	Cauliflower rice Barley Mix rice with equal portion of any peas or beans; lowers GI and reduces calories in meal
Bread made from white flour Any fish or meat in pastry or breadcrumbs or batter or covered in sugar-based sauce/marinade Pizza	Wholegrain, granary bread seeded or nut (bread with bits in) Fillings – egg, tuna, salmon, chicken or meat (taken off a joint not processed sandwich meat), avocado and poached egg, cottage cheese with pineapple or apple slices Any wholemeal bread	Aubergine (eggplant) Thin seeded wholegrain or Oat cracker biscuits Choose small slices or small roll of Granary or Oatmeal bread with filling

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<u>Examples:</u> High GI 'Fast carbohydrates'	Swap for low GI alternative 'Slow carbohydrates'	Swap for lower calorie, low GI alternative
		Green peppers Brussel sprouts Broccoli
Any white flour used for cooking/baking	Wholegrain or add seeds or nuts Mix half white flour with oats or almond or coconut flour Soya bean flour	Chickpea flour
Any Cannelloni Any lasagne Any quiche	Pasta of any shape White or wholemeal Spaghetti or macaroni Quinoa noodles Egg or rice noodles Vegetable moussaka Nut and vegetable roast	Zucchini stripes Kelp noodles (ground seaweed) 60g dry weight of soba noodles or fresh egg pasta filled with vegetables, meat or cheese
White Milk Dark Chocolate	High quality milk/white/dark chocolate	Mango Tinned peaches
Burger bun	Oatmeal or granary roll	Portobello mushroom
Sweets made mainly from sugar	Olives X 6 Nuts 20–30g Any fruit	Slices of apple Any berries Pineapple slices
Cake	Apple oat cake Banana bran muffins Small fruit muffin	2 or 3 mini bite size cakes squares; made with oats or high

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Chapter 17

Vegetables, Salad and Fruit

To date, all advice on healthy eating agrees that people should eat more vegetables, salad and fruit (30). These foods help our bodies function well, slow aging and have been shown to reduce the risk of developing cancer or heart disease or diabetes.

They are 'filling' and low calorie. Vegetables, salad and fruit provide carbohydrate but in small amounts that digest slowly. Plus, the vitamins and minerals contained in them are natural and absorbed into your body better than a vitamin tablet.

All vegetables, salad and fruit are good for you. If you are a 'fussy' eater, aim to include any vegetables or fruit you like in every meal.

When you look at your meal plate, at least 1/3 should be covered by vegetables or salad.

Aim for 5 to 7 portions a day (38).

A portion is

Vegetables and Salad

- 2 Broccoli spears
- 4 tablespoons cooked Kale, spring greens or green bean
- 3 heaped tablespoons of cooked vegetables such as carrots, peas or

Fruit



- **Small fruits** – 2 plums, 2 satsumas, 2 kiwi, 3 Apricots, 6 Lychees, 7 strawberries or 14 cherries.
- **Medium sized fruit** – 1 Apple, 1 banana, 1 pear, 1 orange, 1 nectarine, 1 peach.

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Chapter 18



Literally every function in the human body is controlled by proteins. Protein in food is broken down by your gut into its building blocks, the amino acids. There are 22 different amino acids that your body uses to build new cells.

When people eat food, the body absorbs the protein it needs to maintain and build new cells. Any excess protein from the food is broken down and used as energy. Protein can be converted into glucose.

Protein takes longer than carbohydrate to digest, so the human body gets **energy from protein four to five hours after eating. Meals that contain about 1/3 protein rich foods slow down the rate of digestion. Makes you feel 'full' for longer and less hungry in-between meals.**

Most of the protein we eat is from the muscle of an animal or fish. Muscle tissue in any creature is mainly protein. All living cells have protein as part of their structure so all foods from plants contain some protein. The only foods that do not contain any form of protein such as, refined sugar, fats or oils are pure energy which has been taken out of a plant or animal.

If you do not eat meat, poultry, game or fish, you can get all the protein your body needs from different food combinations. Protein from animals (meat, poultry, game, fish, dairy foods) provide all the amino acids the human body needs. The protein in most plants has some but not all amino acids. The exception is soya which contains all the amino acids. Throughout history, people all over the world learnt that combining certain foods kept them healthy as well as giving them a satisfying meal that tasted good.

Food combinations that provide all the amino acids and work to lower the GI of a meal

1. Pulses – beans, peas, lentils with dairy products (milk, cheese)

Baked beans with grated cheese. Dahl with natural yogurt

2. Wholegrains – brown rice, noodles, couscous, Whole-wheat bread with pulses (beans, peas, lentils)

Baked beans on toast, risotto with peas, Mexican tortilla with refried beans

3. Pulses (beans, peas, lentils) with seeds and nuts

Hummus (chickpeas with sesame seeds), mixed bean salad with flax seeds, vegetable and bean stir-fry with peanuts

4. Dairy (milk, cheese) with wholegrain bread

Cheese sandwich with wholemeal bread, porridge with milk

Eating extra protein does not encourage muscle growth; only muscular exercise over time will build size and strength.

Protein helps to control appetite because it takes longer to digest, giving a slow release of energy.

Proteins are made up of complex building blocks that take longer for your gut to breakdown. This means any excess protein in a meal is used for energy about **four to five hours** after a person has finished eating. If someone ate two scrambled eggs on two toast for breakfast, their body would use the carbohydrate energy from the toast for about two hours then the protein would provide energy later. This has the effect of **controlling appetite (desire for food) or cravings (strong drive to eat) at the next meal**. The body is getting a slow flow of energy, so the brain does not need to drive overeating or choice of foods high in

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that heart attacks are not caused by eating too much fat; it is more complicated than that. There are many risk factors, high cholesterol is one, so is smoking, a family history of heart disease, an inactive lifestyle and obesity. The more risk factors you have and for longer, the greater chance of developing heart disease which is likely to cause a heart attack.

We now know (39, 40, 41, 42, 43)

Dietary fat is not the determinant of either high cholesterol or heart disease. Heart attacks, known as MI (Myocardial infarction) happen after a damaged artery wall gets clogged up with a mixture of cholesterol, calcium and fibre. This is how the human body seals up a damaged artery wall. The trouble is once the fat plug is there, overtime more cholesterol sticks to it and builds up, which gradually fills up the space in your artery. This reduces the blood flow to the heart and makes it more likely a blood clot will form and block the vessel (heart attack). Once an artery on your heart is blocked, your heart is deprived of oxygen and nutrients and it starts to fail. The amount of damage to your heart depends on which coronary artery is blocked.

The Lyon diet study (44)

Compared people who ate a **Mediterranean diet** (low GI carbs, lots of fruit and vegetables, olive oil) to **western diet** high in saturated fat, sugar and refined high GI starchy carbohydrates. The study concluded that Western diets increase the amount of **triglyceride** (fat that can be made from excess sugar and high GI carbohydrate). **High triglyceride is linked with increased inflammation which damages cells. This makes medical conditions characterised by inflammation more likely to happen.**

Research so far has proved that liquid fats such as olive, fish oils are beneficial to our health. Especially those rich in omega 3.

Beneficial Fat

Stick to natural solid or liquid fats; butter, coconut and liquid vegetable, nut, seed or olive oils. Oily fish is a very rich source of omega 3 and omega 6 essential fats that the human body needs.



Reminder – fat is nature's way of providing concentrated energy. So, make sure you have an idea of the calories you are eating to be able to plan meals and make choices of ready-made foods that meet what you need (calories).

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Chapter 20

Energy

What do I need?

It's helpful to know the typical amount of calories, your body needs to function and for your lifestyle.

Once you know the average calories to maintain your current weight, you can plan how to reduce the amount you eat.



Reminder – A sensible reduction in your calories is wise rather than ‘depriving’ yourself by switching to a very restrictive diet. We now understand that dramatic changes to established eating habits do not last long.

Stored body fat is released if you eat less calories than you use up
(body function and movement)



Structured eating with low GI carbohydrate and balanced meals will control your appetite; making it **easier to tolerate eating less** without feeling fatigued and avoiding episodes of overeating.

Fasting for twelve hours overnight makes the body switch to using more body fat for energy. Muscles will be protected because gradual weight loss is loss of fat not loss of body composition *(mix of water, muscle tissue and fat).*

Counting calories does not have to be perfect or exact. But having a rough idea is helpful.

Average daily calorie intake (45)

Age	Males	Females
0–3 months	550	500
3–6 months	600	550
7–12 months	750	700
1–3 years	1100	1000
4–6 years	1500	1500
7–10 years	1950	1900
11–14 years	2400	2300
15–18 years	3100	2500

As humans develop, they need more energy to keep the body functioning and to allow growth. It is interesting to see the increase in calories as children grow, with the largest food intake needed during adolescence for 'puberty'. Puberty is the rapid growth spurt developing from a child to an adult body shape.

Adults	Males	Females
19–34 years	2750	2200
35–64 years	2600	2100
60–64 years	2400	1900
65–74 years	2350	1900
75+ years	2300	1800

UK Energy Requirements based on the average energy required for people of a healthy weight who are moderately active.

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Follow this plan

1. Work out your average daily calorie requirement on a calculator
2. Reduce the number of calories by 500

3. Plan a calorie range for each meal
Start looking at and working out the calorie content of meals, snacks and desserts and drinks you choose the most often...

Easy information – look at packets, search on the internet, consider getting an app that will tell you the calorie content of different foods. Look on websites, such as, BBC Goodfood (47) – gives nutrition information and calorie content of popular meals.

Round the calories to sensible number, does not have to be perfect or exact.

It is crucial to be patient with weight loss. Losing fat means you may only see small weight changes and if you are including exercise body weight is likely to increase in the short term due to an increase in muscle mass.

Remember these changes are improving the health of your body, do not give up.

Use the equation below to work out your average calorie intake (46)

OR download an app that will calculate this for you

Adult Males		Adult Females	
18–30 years	16.0 X weight in kg + 545	18–30 years	13.1 X Weight in kg + 558
30–60 years	14.2 X weight in kg + 593	30–60 years	9.74 X weight in kg + 694
60+ years	13.5 X weight in kg + 514	60+ years	10.1 X weight in kg + 569

The number calculated is the **BMR or basal metabolic rate**; this is roughly the **calories needed for your body to function NOT** for any activity.

If you want ‘fast weight loss’ and have in the past tolerated very restrictive eating, less than 1000 kcals a day, it would be wise to aim to eat the minimum calories your body needs to function (BMR). Otherwise within a few weeks, your metabolism (rate of calorie burning) drops. Back into the vicious cycle of tired, with food cravings.

Next, consider how active your lifestyle is.

Physical activity

The body needs energy from food for movement and clear thinking
 Energy expenditure = **BMR X Physical activity level (PAL)** (48)

PAL is a way to express a person’s daily physical activity as a number

Lifestyle	Description	PAL (49)
Sedentary	Little to no activity sit for majority of the day. Unable or unwilling to exercise. Limited mobility	1.2 Women and Men
Light Activity	Move around some of the day, standing and walking for 1 to 2 hours. Spend a lot of the day sitting	1.4 women 1.5 Men
Moderate Activity	On feet for most of the day, standing and moving about. Examples, working in a shop Or works sitting at a desk but is active for one to two hours a day (walking to work or dog walking or exercise)	1.6 women 1.7 Men
Very Active	Hard daily activity – physical labour – heart rate increases, feel hot, sweat OR work long day on feet, walking around with lifting and moving objects, examples, factory worker, builder, healthcare worker, farm work or gardener	1.8 women 1.9 Men
Highly active or strenuous work	Significant amounts of sport or strenuous work or leisure activity <i>Example:</i> Competitive cyclist	2.0 Women and men ❖ 2.4

Energy needed for body function (BMR) multiplied by the PAL can be used to calculate the amount of food energy (calories) a person needs for their typical lifestyle.

First example:

A man aged 56 works in an office, sits at a desk most of the day, uses a computer and phone. Travels by train has 30-minute brisk walk to and from the station 5 days a week. Plays golf all afternoon one day at the weekend.

- Activity factor = **1.4 Light Activity**

- **Weight** = 14 stone 8 lb or 92.5kg
- **Height** 5 foot 11 inches or 180cm
- **BMI** 28.5 – overweight range

$$14.2 \times 92.5 + 593 = 1906.5$$

Round to a sensible number 1900.

$$\text{Then } 1900 \times 1.4 = 2660$$

Round to nearest 50 = 2650 total average calories a day.

People do not eat food to an exact number of calories. Round up your calculation to the nearest 50 or 100.

A calorie range is more helpful than trying to eat to an exact number. It is impossible to eat to a set number of calories and gives the impression of either over or undereating.

To gradually lose fat, take 500 kcals off your total average calories

For this person to lose fat, he should aim to eat 2150 calories a day.

It is difficult to eat to an exact number so allow an extra 200kcal on top.

This gives a bit of flexibility if you eat a bit extra or misjudge the calorie content.

Aim to eat daily calorie range between 2150 to 2350 calories a day

2nd Example:

Female aged 45 works part time in a shop. Has teenage children and a dog. She is the primary carer for her children and housekeeper because her partner works long hours.

Walks dog most days for 30–45 minutes.

- **Moderate Activity level 1.6**
- **Weight** 11 stone 2 lb or 70.8kg
- **Height** 5 foot 6" or 168cm
- **BMI** 25 – beginning of overweight

$$9.74 \times 70.8 + 694 = 1383.59$$

Round up to the nearest 50 or 100 = 1400kcal

$$\text{Then } 1400 \times 1.6 = 2240$$

Round to the nearest 50 = 2250 kcals a day

To gradually lose weight (take 500 calories off total with flexible 200 calories on top), aim to eat daily calorie range between 1750 to 1950 (see example meal plan with calorie ranges on page 98)



Do you feel put off by equations or numbers?
Don't want to do any maths?



There are apps that will do this for you

All you need is your age, height and weight and the app will calculate your average calorie requirement to maintain your current weight.

1. Know how many calories you need to lose weight
2. Plan the best times to eat meals and snacks
3. Do your best to stick to flexible calorie ranges



Think about the demands of your day and **plan time windows** when you are most likely to be able to eat. **Divide your daily calories up to sensible amounts** that reflect the amount of food you would eat. Breakfast is likely to be the smallest meal, then midday meal and evening meal as the largest of your day.



Do not be put off by the numbers they are a practical way to compare what your body needs with what you are actually eating. **Start looking at how many calories are in the foods you eat the most often.**

Be aware of the energy your body needs. If you are busy, forget or unable to eat in your time window, eat as soon as you can or add the calories onto your next meal. Do not leave food until late afternoon or evening this is **the restrict overeat pattern** of eating.

Meal Plan (for example no. 2) with flexible calorie range

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- After fasting for 18-hours, go back to 12-hour overnight fasting. Aim to eat the calories needed to maintain your weight not the calories to lose weight on the 12-hour fasting days.
- Use the 18-hour fasting days as the time to lose fat.

Social eating, special events and holidays

Usually involve access to larger and higher calorie meals. Either eat your total calories for the morning at lunch or total calories for the afternoon and evening at dinner. It means do not eat snacks and aim for the top end of your calorie range. Otherwise, forget fat loss for one day and allow yourself full weight maintenance calories.

It does not take long to be able to make a reasonable estimate of the calories in food. A lot of what we like to eat we eat often.

The effort put into understanding the calorie content of different foods will make it easier for you in the future.

Eat and repeat – know the calories in foods you enjoy and eat most often.

Summary – Energy



- ❖ People do not follow 'dieting' advice long term.
- ❖ Workout how much energy (calories) your body needs to maintain your current weight. Take off 500 calories.
- ❖ Gain personal experience with a new pattern of eating.
- ❖ Discover how many calories are in the foods you choose to eat the most often.
- ❖ Find out what works best for you.

Chapter 21

Portions

How much should I eat? (37, 50, 51)

For meals that you prepare, there are different options.

Decide which would help you.

Simplest

Judging and serving a balanced meal just by eyesight

Based on using a standard sized dinner plate: measured 10–12 inches or 25–30cm diameter.

- Do not serve food in layers or pile foods on top of one another.
- It helps to serve 'neat' meals where the different food groups can be seen clearly.
- Once the meal is served, you can mix it up to combine flavours.



1. Serve starchy carbohydrate on **no more than 1/3** of your plate.
2. Serve the food high in protein on **1/3 of plate**.
3. Vegetables or salad (generous serving) **1/3 of plate**.
4. Fat one to two portions added as part of meal or in food naturally or as a gravy or sauce or added during cooking.



Look at the calorie content of foods you buy. Pre-package foods should have the calories written on the packet.

If you are making a meal by following a recipe and it does not tell you the calorie content, have a look on a website that offers recipes with nutrition information; the BBC good food is one useful website. If you decide to buy a cookbook, it helps to choose one that tells you the calories of each meal serving.



Get a rough idea how many calories are in a snack or meal; it does not have to be a perfect number. If you make a meal and do not know what is in it, then go on a website that gives nutrition information and search a similar version of the meal you are making.

If you weigh out foods, it's easy to search online or get an app that tells you the calorie content. Then put this portion into a measuring jug or a cup and mark or write down the measurement. This way, you won't have to keep weighing out your portions just fill the jug or cup to the level.



Are you thinking this is too much fuss and effort, I know I won't do that! People repeat eating the same meals and foods multiple times. Therefore, the effort you put into gaining knowledge about the calorie content will not need to be repeated again. Write it down or put into notes on your phone.

As part of my job as a dietitian, I would do calorie estimates in my head from someone's record of what they ate. It does not take long before you can make a reasonable judgement. Many of the people I helped had established knowledge of the calories in foods because they had spent so much time thinking about food when they were trying to lose weight.

Consider buying a portion control tool

Have a look on-line at:

- Portion plate
- 6-piece plastic portion set

- Three compartment food containers (great for preparing in advance to take to work or college or ready for when you get home).
- Portions Master

Portion control tools are a straightforward way to control the amount you eat by filling up the compartments, so you do not have to weigh out or measure.

Layered food that combines two or three food groups in a serving, such as cottage pie, lasagne, tortilla, should only fill 1/3 of a plate or one portion compartment.

Habits are established after about three months repeating new behaviours. That means it takes a lot of effort in planning and preparing what you are going to eat to establish healthy eating behaviours. **It will get easier with time.** A habit is something we do without thinking, feels automatic.



Reminder

- ❖ If you eat meals at similar times each day, this gives your body the nutrients it needs to function well.
- ❖ This satisfies hunger, the body's need for regular energy.
- ❖ A consistent eating routine stops your brain driving your appetite (desire to eat) **so you will be able to tolerate eating smaller portions and make healthier choices.**

If switching to healthier foods is not working out:

That is, you do not enjoy the taste and do not feel satisfied after eating. Consider eating what you enjoy but controlling the portions. You will need to find out roughly how many calories there are in your favourite foods and limit what you eat to meet the calorie range planned for each meal.

If you like to feel 'full after eating':

Especially your main meal. Eat more vegetables or salad and add more protein foods; lean meat, poultry, game, fish, peas, beans, lentils, quorn, tofu.

If you don't like cooking or feel 'tired' and lack motivation:

Particularly at the end of the day, buy ready meals. Look for ones that are balanced, containing starchy carbohydrates, protein, fat and vegetables or salad.

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1 buttered granary or seeded roll + 1 bowl of thick vegetable/tomato/meat/chicken/lentil soup (tinned or homemade) + sprinkle of grated cheese on top

1 large pitta bread with hot filling of fried onions with sliced steak or chicken or vegetable sausages + salad, full fat mayonnaise, mustard or chilli sauces optional

Ideas for side salad to fill side dish or side plate or 1/3 of your dinner plate

Mixed leaves of lettuce, cucumber, tomato, spring onions, watercress, etc.

Optional add 2 dessertspoons of sliced or tinned fruit e.g. pineapple or apple + 1 spoonful of nuts.

Or/1 heaped tablespoon of tinned sweetcorn, kidney beans or chickpeas.

Or/1 heaped dessertspoon of dried fruit or ½ a sliced avocado.

Or/olive oil and balsamic vinegar dressing or any oil-based favourite salad dressing 2–3 level tablespoons 30–45ml.

OR/ready-made bag of mixed salad from supermarket or salad selected from salad bar in supermarket.

Optional sauces – Mustard, salad cream, mayonnaise, chilli sauces, tomato ketchup or

dips e.g. tzatziki, hummus, salsa, taramasalata, guacamole

Ideas for low GI snacks between 100 to 150kcal
A small handful 30g nuts – salted, plain or dry roasted OR A hard-boiled egg
A piece of fruit – ½ grapefruit, 1 apple, 1 peach, 1 orange, ½ large banana, ½ mango, ½ pineapple with 15g nuts or seeds or coconut
½ Individual packet of peanut M&Ms 20–25g OR ½ individual tube of smarties 16 sweets OR Small white chocolate milky bar OR 1–2 individual dark chocolate with mint crème centres OR 2–3 squares of dark chocolate 25–30g
1 apple sliced with 2 teaspoons of nut OR peanut butter

2 Oat crackers with 2 heaped teaspoons of cream cheese OR full fat hummus OR peanut butter OR nut butter
Small individual bar of chocolate with high % of cocoa solids >50% or 30g chocolate covered nuts or 30g dark chocolate covered dried fruit
200ml flavoured soya milk drink OR 200ml drinking yogurt OR probiotic plain yogurt drink Small or medium latte or glass of soya milk
Protein cereal bar or low carb cereal bar – look for carbohydrate content less than 15g per bar OR chocolate covered wafer biscuit
1 scoop of full fat ice cream – <i>size of ½ tennis ball to fit on top of wafer cone</i> 1 individual pot of crème caramel or a mousse (any flavour)
4 cherry tomatoes with 20g cheese – <i>size of 4 sugar cubes</i>
Individual packet of salted OR plain popcorn 1 scoop of dairy ice cream or dairy free ice cream with 20g chocolate covered nuts or 1 sweet oat biscuit crumbled on top
1 large or 2 small sweet biscuits made with oats
Small banana sliced or ½ mango or 2 pineapple rings with 125g full fat yogurt/soya yogurt OR 1 scoop of ice cream (plain, no sugar syrup or chocolate pieces) OR custard
Individual tub OR 125g of full fat natural yogurt or soya yogurt OR custard with 1 heaped teaspoon of jam OR honey or maple syrup and sprinkle of chopped nuts or seeds on top

Summary – Portions

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If an advert for an all-inclusive holiday said...



Travel to beautiful countries

Great entertainment

Luxury accommodation

Opportunity to binge on alcohol and food for two weeks



Guaranteed weight gain



Will have suntan, higher cholesterol and increase in blood pressure

Go home with fatty liver and stomach hanging a bit further over your trousers

No travel company would agree with this because no one forces us to overeat or binge on alcohol.

Overeating and binge drinking alcohol actually harms our health, but because the effects aren't immediate, we soon forget how rough it made us feel and then repeat the same behaviour.

Do your best to control what you eat and drink

Most people want to be fit and healthy. Practise turning your thoughts from short-term pleasure to thinking how great you will feel when you are slimmer and fitter. It helps if you remember a time in your life when you weighed less and were more active. If you have a photograph of yourself at a lower weight, put it somewhere like the fridge door as a motivator.

Making healthier choices is an important part of being kind to yourself. This means not behaving in a way that harms you.

Treat yourself like you would someone you are responsible for helping.

Another popular eating event in the UK is going for an Indian or Chinese restaurant meal or takeaway. Chinese and Indian cuisine offers a wide variety of meals with different flavours. Somehow, it has become normal to order excessive amounts of food.

For a typical Indian restaurant meal or takeaway, its estimated people eat about 1500kcal. This includes one main dish, a rice or whole naan bread and a side dish and a poppadum with sauces.

If people eat all that plus a second side dish or a whole rice and a whole naan or chapatti to themselves, they are looking at around 2500 calories for one meal, none of this includes the alcohol.

My point is **not** to be saying do not eat Indian or Chinese food, because it is delicious. It's to emphasise the reality that what is accepted as normal is **actually overeating**.

I would recommend you have:

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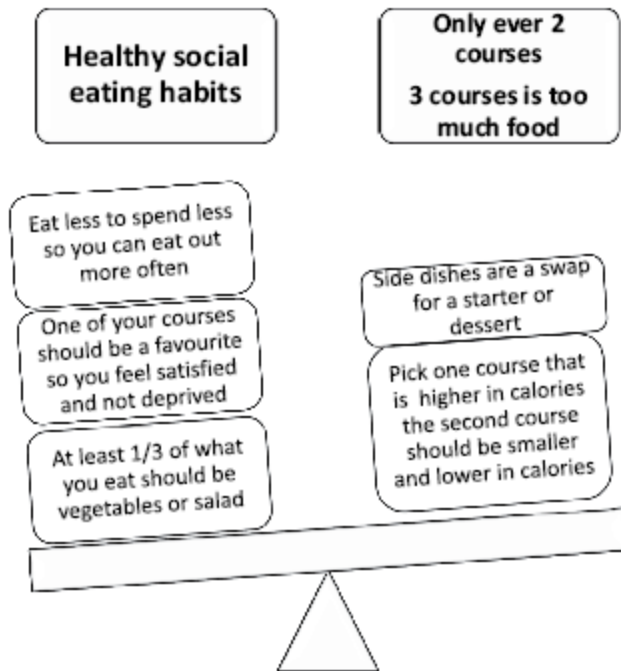
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Summary – Social eating

- ❖ Practise new eating habits all day every day, this includes social eating and holidays
- ❖ Plan ahead what you are going to eat and drink before going out, this helps.

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How open minded are you to changing the way you eat?

Just imagine what life would be like if you lost fat,
became more active and felt fitter



Do you feel willing to change?

Are you able to change?

Discuss the changes you want to make to eating and
activity habits with partners and/or significant people in
your life

Ask for their support



Change is a cycle that you need to repeat several times
before your brain settles into new eating and activity
behaviours



The experience of each cycle shows you what works and
what does not

Lapses back to old eating habits are not a failure



Problem solve what went wrong and try again

What is the 'meaning and purpose' behind the desire to change eating and activity habits



Think about your *patterns of behaviour* that trigger eating too much or bingeing on alcohol

The brain will keep driving you to maintain old behaviours

Change depends on understanding eating habits

TRIGGER – BEHAVIOUR – REWARD

THOUGHT – EFFORT – RESIST URGES



Food is not bad it's just energy

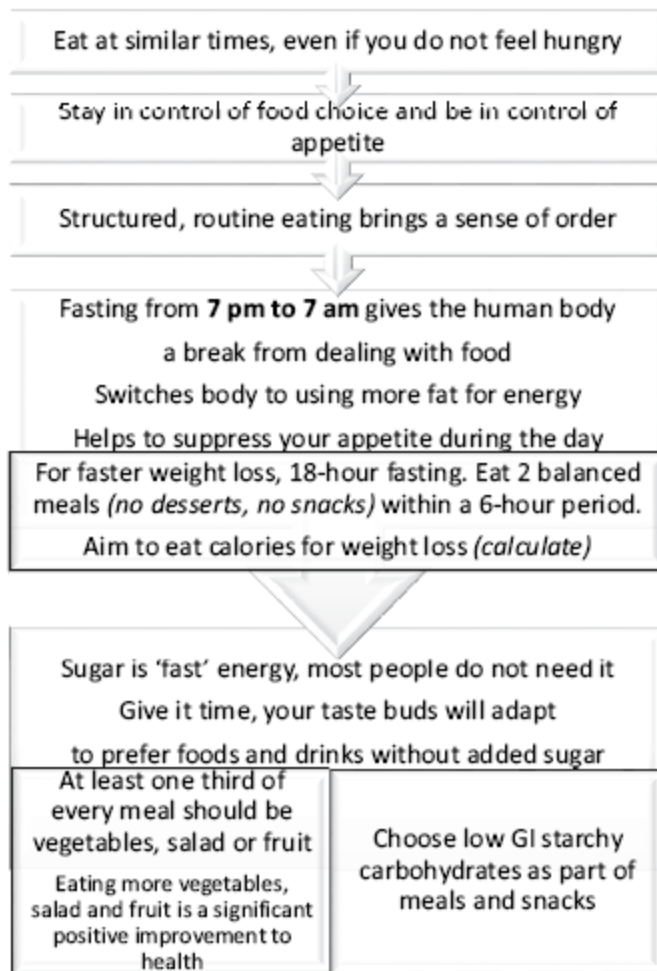
Get an idea how much energy (calories) is in the foods you choose to eat the most often



The human body functions at its best if it is given the nutrients it needs (*fat, carbohydrate, protein, vitamins, minerals, fibre*) in regular meals

If you deprive your body with disordered restrictive eating,

it will drive you to over eat or binge



You need to know roughly how many calories your body needs to hold its current weight, then take 500 calories off

Start looking how many calories are in foods you eat often and compare it to what you should be eating



When choosing a meal, think 'balance', one third starchy carbohydrate, one third food high in protein, one third vegetables or salad, one to two portions of fat
as part of or added onto a meal

If you struggle with feeling hungry, increase the amount of protein and vegetables in your meals



Try different ways of 'quick and simple' portioning
Effort in the early days will be rewarded with knowledge about nutrition and healthy eating habits that are automatic

Take full responsibility for everything you eat
and drink



Any regular exercise will improve your physical
and mental health

Exercise improves body composition by using
up stored body fat, building muscle and
reducing insulin resistance



Dieting does not work long term because
it only changes your body

Changing eating habits works because it
transforms your body and your brain

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Week 1.

Overnight fasting

- No food or drinks that contain calories for twelve hours every day
- As often as possible, keep fasting between **seven in the evening to seven in the morning**

Week 2.

No fast carbohydrates

- No added sugar, no foods that sugar is listed as the first ingredient
- Definitely no sugar in drinks
- Swap the starchy carbohydrate foods you eat the most often for a lower GI alternative
- Reduce the amount of foods you eat made from white flour

Week 3.

Structured mealtimes

- Give your body what it needs to satisfy hunger (*physical need for energy*) and be in control of your appetite
- Eat at similar times; flexible half to one-hour time window to keep on track with your eating pattern

Week 4.

Balanced Meals

- When you look at the portions of food in your meal, it should be roughly one third starchy carbohydrate, one third vegetables, salad or fruit, one third a food high in protein and some fat added or as part of the food

Week 5.

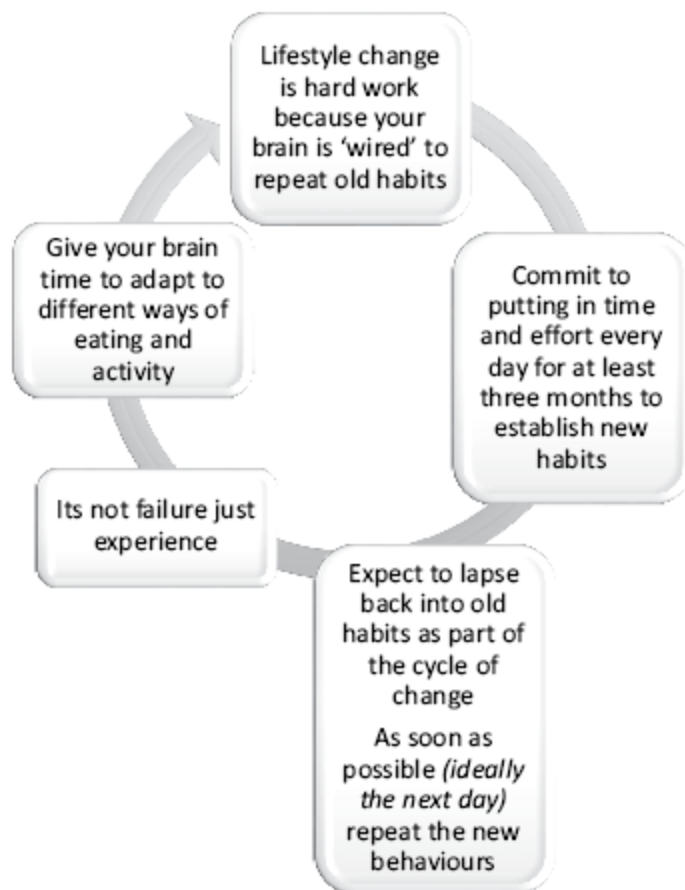
Become more active

- Exercise will transform your body composition
- Gain muscle whilst gradually losing excess body fat
- Choose realistic exercise that will fit in around work and family life
- Choose exercises that make you feel good Mix them up

Week 6.

Swap the foods you eat the most often to healthier versions

- Increase the vegetable, salad and fruit content of your meals
- Quality not quantity
- Buy the best version of a food you can afford
- If meaning and purpose helps motivate healthy diet changes, consider free range or organic produce, vegetarian/vegan meals and more home cooking



Chapter 25

Guidelines

Start with number one, for a week, then keep changes moving forward by focusing on the next health boosting change each week. If after a few weeks one or more of these changes has stopped, then start back at the beginning. The repeat experience of the health boosting changes means you will be able to move through the stages quicker.



Reminder

Change is a cycle that will need to be repeated several times before your brain allows new habits to replace the old.



If you feel impatient and want to see rapid weight loss, think about how long you have been overweight. How many times you have tried to 'diet' and ended up regaining all that was lost.

Establishing new eating and activity habits to permanently transform your body shape and health takes time.

Week 1

Get used to the overnight fasting for one week

- ❖ The fasting will switch your body to using more stored body fat for energy, plus it will help control your appetite during the day.
- ❖ After one-week, start cutting down on sugar (week 2)

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- ❖ Make sure your fridge, freezer and cupboards are stocked with healthy low GI foods, so that when you feel tired and hungry, you will stick to new habits.
- ❖ It is more important to gain an idea of how many calories are in food rather than worrying about how much fat is in it.

On week 5, introduce physical exercise.

Week 5.

When you feel in control of your eating pattern and appetite, focus on being more active.

- ❖ If someone wants fast weight loss and chooses to eat a very low-calorie diet and exercise, this is effective for about three months, then a combination of hunger and fatigue 'kick-in'. This is a trigger back to old eating habits and leaves people feeling less motivated, too tired to exercise, with a sense of 'whatever I do, I cannot lose weight'.
- ❖ To lose fat, work on changing eating habits first and then bring in exercise. Exercise together with dietary change is more successful in losing weight and keeping it off. Exercise on its own without dietary change has little long-term effect on weight loss.
- ❖ The human brain needs time to adapt to changes in eating routine, reduction in food portions and alcohol.
- ❖ Exercise will be easier at this stage because you will have lost some body fat, have more energy and feel less hungry



- ❖ Introduction of exercise maintains gradual loss of fat and promotes muscle development. Muscles are the big energy burning cells of the body. This starts the transformation to a more athletic body shape.
- ❖ Choose exercise you are physically able to do that fits around your lifestyle. Establish regular exercise sessions between thirty to sixty minutes, three to six times a week.

Week 6

Focus on healthier food choices.

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Chapter 26



What If

What if I have a sedentary lifestyle?

Inactive, sit most of the day, minimal walking, either through choice or unable to be active due to a disability?

1. Weeks one to four and six (*overnight fasting, no fast carbohydrates, structured mealtimes, balanced meals, healthier food choices*) will make a significant improvement to health with gradual loss of excess body fat.
2. It helps to work out your average energy requirements and make a plan of calorie ranges for meals and snacks. Spend time learning roughly the calories in the portions of the foods you eat most often. Most people have no idea how many calories are in foods they enjoy; it is easy to eat more than you need.
3. As people age, body composition changes, losing muscle and gaining fat. Pay attention to your carbohydrate portions, you definitely **do not need fast carbohydrates** if your lifestyle is inactive. Go for **low GI starchy carbohydrates** and swap some of the portion for extra food rich in protein, vegetables, salad or fruit.
4. **When serving a meal cover one quarter of your plate with low GI starchy carbohydrate**, split the remaining plate, half vegetables or salad and half protein food.
5. See low GI simple meals for ideas on the portions and controlled portions of low GI carbohydrate.

If you need medication, check the side effects. Some drugs can increase appetite or increase insulin resistance, such as steroids and some anti-depressant medication. Do not stop taking any prescribed medication without discussing possible alternatives with a doctor first. Mental or physical health problems may take priority over the desire to lose weight.



What if I have type 2 diabetes?

Loss of body fat will lower insulin resistance. If a person with type 2 diabetes loses significant abdominal (belly) fat, they can reduce or stop needing medication or insulin injections to control their blood glucose level.

Diabetes and improving blood glucose control is all about losing excess belly fat.

Reducing the amount, a person eats and doing regular exercise achieves weight loss. Research (52) reports it does not matter if the diet is low in carbohydrates or low in fat, compliance is what works.

The trouble is old eating habits creep back in and people regain the weight they lost. Rather than low carb or low-fat diets, go for low GI carbs, control your portions, cut out fast carbohydrates. Be sensible with fat and go for healthy fats whenever possible.

1. **Definitely overnight fasting for twelve hours**, fourteen if you can manage it. To lose fat, control your appetite and improve blood glucose control.
2. **Definitely no fast carbohydrates, no sugar in drinks, no fruit juice, no sugary sweets.**
3. Focus on **controlled portions of low GI starchy carbohydrate with balanced meals.**
4. See Low GI simple balanced meals and snacks to get an idea of the mix and type of foods to eat.
5. **Any increase in activity helps lower insulin resistance.** The stabilising effect on your blood glucose lasts between 24 to 48 hours after exercise. To get rapid improvement in blood glucose control, incorporate six hours of exercise a week.

Follow health-boosting changes from week one to six.

If you have been prescribed medication, tablets or insulin to control blood glucose, as you start to reduce the amount of carbohydrate eaten, you won't need as much medication or insulin. Speak to your Diabetes Nurse or Doctor, so you feel confident to reduce these to prevent hypoglycaemia (drop in blood glucose below 3.5mmol/L).

Care for your body as well as you would look after someone you are responsible for.



What if I am very active?

What if I am overweight but have a physically demanding job or family life or do regular exercise?

People who have active lifestyles can find reducing what they eat difficult as they become hungry, tired and go back to go old habits in order to feel satisfied with what they eat.

1. **Definitely, overnight fasting will improve health and reduce body fat.**
2. Start with this and eat what you need to feel satisfied in the daytime.
3. Know your average energy requirements. Spend time looking at the calorie content of the foods you eat the most often.
4. **Focus on meal structure and balanced meals to control your appetite.**
5. If you do not eat breakfast, I would strongly recommend eating breakfast to gain control over what you eat in the evening.
6. Consider snacks between meals to take the edge off your hunger so you are able to reduce the amount eaten in the evening.
7. Increase the protein, vegetable/salad/fruit content of meals particularly at breakfast and lunch to stop snacking or second helpings later in the day.



What if I am a fussy eater and hate vegetables?

Not everyone likes healthy eating. Some people do not like the taste of a lot of vegetables and salad.

1. **Definitely, the overnight twelve hours fasting**, to start losing fat and control appetite.
2. **Focus on structured mealtimes with controlled starchy carbohydrate portions.**
3. If you do not like the low GI or wholegrain starchy carbohydrates, such as seeded bread or brown rice, have a smaller portion of the one you like.
4. Include a snack between meals during the day to take the edge off your appetite before the next meal so you can tolerate a smaller portion. Another way is to spread food out, for example, take two rounds of sandwiches to work, eat ½ sandwich mid-morning, whole sandwich at lunch, ½ mid-afternoon. All this does is give your body energy slower over a longer time; it does not have to deal with a rapid surge in blood glucose from eating a big portion of high GI carbohydrates.
5. Try not to eat high GI carbohydrates on their own, such as white toast with jam, instead white toast with peanut butter or cream cheese or cheese on toast or scrambled eggs or meat, chicken or bacon sandwich.
6. Stop sugary drinks, give your taste buds time to adjust, for example swap sugar in coffee for a plain oat biscuit.
7. Even if you only like one or two vegetables or salad foods, include them in a meal as often as you can. Try meals where vegetables have been added and become part of the sauce such as stews or casseroles; disguises the texture and flavour.
8. Know your average energy requirements. Spend time looking at the calorie content of the foods you eat the most often. Compare the numbers to what you should be eating to lose weight.



What if I binge eat?

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Ideally, start with exercise that is mainly muscular as it has a better effect on body composition (muscle gain) and does not make people feel so hungry.

Cardiovascular exercise such as running or cycling burns more calories but drives hunger so may drive episodes of bingeing.

7. Lapses into binge eating is not a disaster

Think about what was happening on the days leading up to a binge. Was it triggered by hunger or emotions? Look for behaviour patterns so you know when you are more likely to binge.

Distract yourself with something else which makes you feel good.

If eating has become disordered, get up the next day and start again with an ordered meal and snack routine.

Breakfast is extremely important to control appetite later in the day.



What if I feel fatigued?

Fatigue is a feeling of extreme physical and mental tiredness. It's difficult to make changes to eating and activity habits if you have fatigue.

People who feel fatigued would be wise to focus on managing this before trying to lose weight. Are you getting enough sleep? Does your job or family life leave you feeling drained?

1. Structured eating with balanced meals and low GI starchy carbohydrates would help stabilise energy levels during the daytime.
2. No added sugar, sugary drinks or foods mainly made from sugar.
3. No caffeine after four in the afternoon.
4. Focus more on healthy food choices, more vegetables, salad and fruit, quality protein foods and fats; natural, unprocessed.
5. Exercise that would be the most beneficial is yoga or tai chi with or without meditation; muscular exercise that is mentally calming. When possible, exercise in the morning. Early activity lowers levels of stress hormones in the body and brain for the rest of the day; helps deal with anxiety.
6. Speak to partners, family, friends and ask for support.

Care for your body as well as you would look after someone you are responsible for.



What if I want to see fast weight loss?

Do you have a determined or impatient personality who decides 'I want to see fast weight loss'? Do you leave it until a few weeks before a holiday or social event to slim down to a weight you want to be?

It is possible to lose weight fast over a short period of time with low calorie diets, typically less than 1000kcal a day. This is not a lot of food.

Studies (56, 57) have followed people who have lost large amounts of weight found that the majority re-gain the weight.



Reminder – The history chapter explained how the human body copes with a starved state for about three months and then it drives you to eat to recover lost weight.

A pattern of yo-yo dieting favours muscle loss as well as loss of body fat.

1. A **wise choice** for the impatient and determined would be too **fast for 18 hours** a day, eating two balanced meals within a 6-hour period. This works to switch your body to use mainly stored fat for energy. This suppresses appetite so people are better able to tolerate eating less calories. Aim to eat your weight loss calorie range within the 6-hour window to maintain healthy body function whilst losing body fat; stops the body going into starvation mode and slowing the rate, it burns calories.
2. Plan structured balanced meals with low GI starchy carbohydrates.
3. No added sugar, sugary drinks or foods with high sugar content.
4. For best results, exercise three to six times a week; aim for six hours exercise. Do weight training first followed by cardiovascular exercise. The weight training uses up glycogen stores (stored glucose) so the body has to release more body fat for energy during the cardiovascular exercise.

5. When you have had enough of 18-hour fasting, go back to 12-hour fast overnight, ideally 7 pm to 7 am in the morning; for maintenance of lost weight and to control appetite. You need to know your average energy requirements to plan what to eat to maintain your weight.



What if I love sweet foods, biscuits, cake, sweets?

I know I won't be able to stop eating them

Next time you go into a supermarket, bakers or corner shop spend a minute looking at the range of snacks, cakes and biscuits on offer. Food shops show you what the majority of people choose to eat. Each year, new products are introduced, if they don't sell enough, foods are taken off the shelves.

Not everyone likes healthy food choices. The main reason people become overweight is because of their eating habits; food choices and portion sizes. Habitually, eating more calories than their body uses up.

If you are thinking, I do not like healthy eating or low GI foods. That is your choice; no one can force you to eat foods you do not enjoy.

It is still possible to improve your health by losing body fat.

1. **Definitely do the twelve hours overnight fast.**
2. Structured meals and snacks. Plan time windows to eat and do your best to stick to it.
3. Know your average energy requirements. Start looking at the calories in the foods you eat the most often and compare it to what you need. Reduce portion sizes to meet your calorie range.
4. **Spread out your food** especially if they are made from high GI carbohydrates; white flour and sugar. For example, if you take a sandwich, packet of crisps and a chocolate bar to work. Eat the chocolate bar mid-morning as a snack, the sandwich for lunch and the crisps for an afternoon snack. This will control your appetite and reduce the surge in blood glucose simply by eating less at any one time. Commit to following an ordered meal and snack routine.
5. **Definitely eat breakfast** to control appetite later in the day.

6. Introduce exercise three or four times a week. Aim for six hours of exercise a week. Cardiovascular exercise suits people who eat high GI carbohydrates. Fast carbohydrates can be eaten around intense calorie burning activity such as running or cycling.



What if when I eat more wholegrains, vegetables, salad and fruit, I get IBS?

IBS or irritable bowel is a common problem effecting the digestive system. Symptoms include bloating which may cause 'colicky' pain, alternating bowel habit typically constipation and/or diarrhoea. Healthy eating advice encourages people to eat more fibre because it helps control appetite by giving a 'full' sensation in the stomach and bowel which stops us eating too much. In populations where people regularly eat a lot of fibre, there is a lower incidence of bowel cancers.

Eating more gas-producing foods, like lentils, beans, cruciferous vegetables (*cauliflower, brussels sprouts, cabbage, bok choy, radish*) and increasing fibre intake with wholegrain breads or rice, doesn't suit everybody. Some people do not tolerate a high fibre intake.

Fibre is the part of plant foods that cannot be broken down by the human gut to use for energy so travels to the large bowel where it helps get rid of bowel waste by forming firm stools.

There are two types of fibre, insoluble and soluble. Insoluble fibre is known as 'roughage', like the bran in wholemeal bread. This fibre is the most likely to irritate the digestive tract. The second fibre is soluble, usually part of the flesh of vegetables and fruit. Soluble fibre easily dissolves in water and is broken down into a gel like substance in the bowel. This gel is helpful in preventing constipation and is much less likely to cause irritation or bloating in the digestive tract.

If when you eat more vegetables, salad and fruit you suffer with IBS, reduce the insoluble fibre content of your diet and see if this stops the bloating. Whole nuts and seeds can irritate some people's bowels. Rather than avoiding, try seeds or nuts that have been ground or turned into a smooth butter.

Ways to reduce insoluble fibre content of foods...

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